CONTENTS

G. Birkhoff, M. Plesset, N. Simmons: Wall effects in cavity flow—I 151

F. E. Bothwell: Transients in multiply periodic non-linear systems 247

O. L. Bowie: Practical solution of simultaneous linear equations 369

H. Bückner: A variational problem for the roots of a cubic equation 293

H. W. Emmons: Note on aerodynamic heating 402

R. A. Eubanks (*see E. Sternberg*)

G. W. Evans II, E. Isaacson, J. K. L. MacDonald: Stefan-like problems . . . 312

C. Ferrari: Study of the boundary layer at supersonic speeds in turbulent flow . 33

H. E. Fettis: A method for obtaining the characteristic equation of a matrix and computing the associated modal columns 206

J. R. Foote and C. C. Lin: Some recent investigations in the theory of hydrodynamic stability 265

William Feller and George E. Forsythe: New matrix transformations for obtaining characteristic vectors 325

George E. Forsythe (*see William Feller*)

C. P. Gadsden: An electrical network with varying parameters 199

G. Guderley and H. Yoshihara: An axial-symmetric transonic flow pattern . . 333

G. H. Handelman (*see H. J. Weiss*)

A. E. Heins: The reflection of an electromagnetic plane wave by an infinite set of plates—III 281

Jacques Heyman: Plastic design of beams and plane frames for minimum material consumption 373

P. G. Hodge, Jr.: The method of characteristics applied to problems of steady motion in plane plastic stress 381

E. Isaacson (*see G. W. Evans II*)

J. C. Jaeger: Conduction of heat in composite slabs 187

H. G. Landau: Heat conduction in a melting solid 81

C. C. Lin (*see J. R. Foote*)

L. A. MacColl: Pseudo closed trajectories in the family of trajectories defined by a system of differential equations 255

J. K. L. MacDonald (*see G. W. Evans II*)

L. E. Malvern: Plastic wave propagation in a bar of material exhibiting a strain rate effect 405

C. G. Maple: The Dirichlet problem: bounds at a point for the solution and its derivatives 213

J. C. Martin: Retarded potentials of supersonic flow 358

M. H. Martin: A new approach to problems in two-dimensional flow 137

D. Middleton: The spectrum of frequency-modulated waves after reception in random noise—II 59

John W. Miles: Quasi-stationary airfoil theory in subsonic compressible flow . . 351

John W. Miles: A note on Riemann's method applied to the diffusion equation . 95

Max M. Munk: The Rankine gas flow in the hodograph plane 387

R. C. O'Rourke and A. W. Saenz: Quenching stresses in transparent isotropic media and the photoelectric method 303

R. S. Phillips: The electromagnetic field produced by a helix 229

M. Plesset (*see G. Birkhoff*)

G. Pólya: A note on the principal frequency of a triangular membrane . . . 386

M. Reiner: The rheological aspect of hydrodynamics 341

M. A. Sadowsky and E. Sternberg: Elliptic integral representation of axially symmetric flows 113

A. W. Saenz (*see R. C. O'Rourke*)

Bibhutibhusan Sen: Note on the stresses produced by nuclei of thermo-elastic strain in a semi-infinite elastic solid 365

H. Serbin: Periodic motions of a non-linear dynamic system 296

N. Simmons (*see G. Birkhoff*)

I. Stakgold: The Cauchy relations in a molecular theory of elasticity 169

E. Sternberg and R. A. Eubanks: On the method of inversion in the two-dimensional theory of elasticity 392

E. Sternberg (*see M. A. Sadowsky*)

J. L. Synge: Note on the kinematics of plane viscous motion 107

K. Tamada (*see S. Tomotika*)

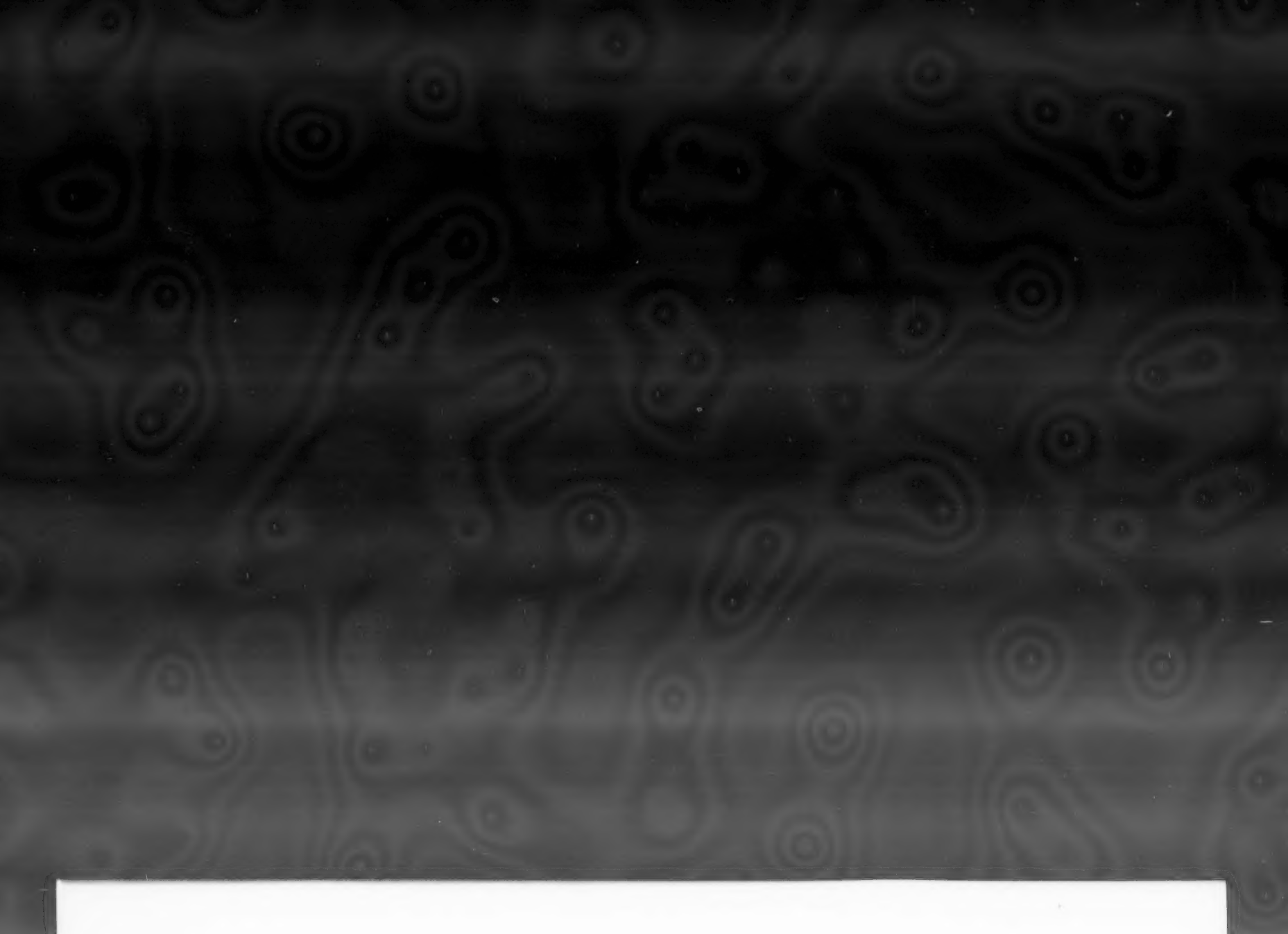
S. Tomotika and K. Tamada: Studies on two-dimensional transonic flows of a compressible fluid—Part II 127

H. S. Tsien: A generalization of Alfrey's theorem for visco-elastic media . . . 104

G. H. Wannier: A contribution to the hydrodynamics of lubrication 1

H. J. Weiss and G. H. Handelman: A minimum principle for structural stability 395

A. Wintner: On free vibrations with amplitudinal limits 102

H. Yoshihara: (*see G. Guderley*)

Book Reviews 109, 319, 411